

Work Order ID 91915

91915

Page 1

October-19-12 2:31:11 PM

Item ID: D3672-3 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Phenolic Washer
 Start Date: 10/18/12 Start Qty: 500.00 ***500*** Cust Item ID:
 Required Date: 11/09/12 Req'd Qty: 500.00 ***500*** Customer:
 Reference:

Approvals: Process Plan: ML5 Date: 12-10-22 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3672	Rev C

100 PURCHASING 0.00
100
 Purchasing Memo 0.00
 Purchasing Issue P/O 18215
 Purchase Part Number: MM .500 OD X .267 ID X.031 +/- .002
 Supplier: HASKINS INDUSTRIAL
 Certificate of conformity is required

12-10-23

110 Receive & Inspect for Damage & Mat'l Certs 0.00
110
 Packaging Memo 0.00
 Packaging Ensure certificate of conformity is attached

12/14/25 (515)

120 QC6- Inspect dimensions to drawing 0.00
120
 QC Memo 0.00
 Quality Control

DAS 16 12/10/24

(515)
 QSP019

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

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 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>ST 61</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

5/5x

12/10-26

12/10/29
MLJ 12-10-26

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY											
Landing Gear			General								
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced							
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure							
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld							
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled							
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved								
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong								
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other							
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset									
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration									
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence									
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions									

Picklist Print

October-19-12 2:31:11 PM

Page 1

Work Order ID: 91915

Parent Item: D3672-3

Parent Item Name: Phenolic Washer

Start Date: 10/18/12

Required Date: 11/09/12

Start Qty: 500.00

Required Qty: 500.00

Comments: IPP Rev:A New Issue 07-09-09 JLM Verified By:EC
IPP Rev:B ECN 1056 07-11-13 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3672-3P WASHER		Purchased	No			110	Each	0.0000	1	500		10/19/12	510

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

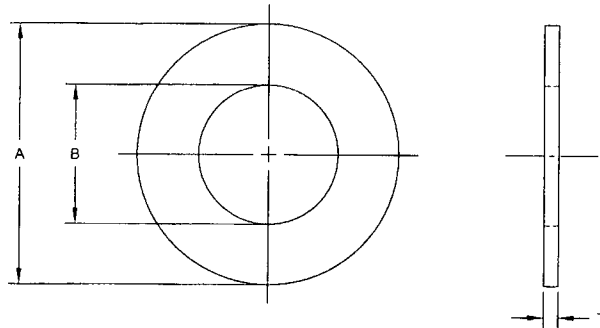
DQA: _____ Date: _____

QA Closed: _____ Date: _____

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Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
Landing Gear			General			Grain		Pressure/Forced	
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
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<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

SPECIFICATION CONTROL DRAWING



D3672-X PHENOLIC WASHER

Dart P/N	A (IN)	B (IN)	T (IN)	SUPPLIER P/N	REPLACES
D3672-1	0.437	0.210	0.031	MM .437OD x .210ID x .031 +/- .002 PHENOLIC FLAT WASHER	NAS1515H3L
D3672-3	0.500	0.267	0.031	MM .500OD x .267ID x .031 +/- .002 PHENOLIC FLAT WASHER	NAS1515H4L
D3672-5	0.562	0.326	0.062	MM .562OD x .326ID x .062 +/- .002 PHENOLIC FLAT WASHER	NAS1515H5
D3672-7	0.562	0.328	0.031	MM .562OD x .328ID x .031 +/- .002 PHENOLIC FLAT WASHER	NAS1515H5L
D3672-9	0.625	0.390	0.031	MM .625OD x .390ID x .031 +/- .002 PHENOLIC FLAT WASHER	NAS1515H6L
D3672-11	0.750	0.453	0.031	MM .750OD x .453ID x .031 +/- .002 PHENOLIC FLAT WASHER	NAS1515H7L
D3672-13	0.875	0.515	0.031	MM .875OD x .515ID x .031 +/- .002 PHENOLIC FLAT WASHER	NAS1515H8L



NOTES:

- 1) MATERIAL: PHENOLIC. PURCHASE HASKINS INDUSTRIAL INC. P/N PER TABLE (IN QUANTITIES OF 1000)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

SEE ALSO
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO 91915 ML5
12-10-22

RELEASED
2009-12-14

C	REDRAW, ADD -13 (ZN A8-1), PAR 09-038	CP	09.11.04
B	ADD -5/-7/-9/-11	DC	07.10.09
A	NEW ISSUE	DC	07.08.28
REV.	DESCRIPTION	BY	DATE
DESIGN	DC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JP		
CHECKED	JP	DRAWING NO.	REV. C
MFG. APPR.	JP	D3672	SHEET 1 OF 1
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	PHENOLIC WASHER	NTS
DATE	09.11.04	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO18215

Purchase Order Date 10/23/12

PO Print Date 10/24/12

Page Number 1 of 3

Order From :

VC-HAS001

HASKINS INDUSTRIAL
5-52 ANTARES DRIVE
NEPEAN, ON K2E 7Z1
CA

Contact Name

Vendor Phone

613 723 8800

Vendor Fax

613 723 8806

Vendor Account Nbr

Buyer

Brigitte Golden

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3672-3P	WASHER	10/26/12 Yes	500.00 Each	Dicom	\$0.3229	\$161.45
Special Inst: Per DWG: D3672 Rev: C B91915							
2		110-0375-201 3/8" CARB END-MILL	10/26/12 Yes	4.00 Each	Dicom	\$21.5700	\$86.28
Deliver To: CNC							
3		136-758 5/16 RAD CRNER ROUND CUTTER	10/26/12 Yes	2.00 Each	Dicom	\$104.1300	\$208.26
Deliver To: CNC							
4		A012 #12 JOBBER DRILL TIN	10/26/12 Yes	10.00 Each	Dicom	\$2.0500	\$20.50

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 2

Change Date: 10/24/12

HASKINS INDUSTRIAL INC.
5-52 ANTARES DRIVE

** PACKING SLIP **

Order # 1246676.

NEPEAN, ONTARIO K2E 7Z1
TEL (613)723-8800 FAX (613)723-8806

Order Date 10/24/12

Page 1 of

Sold To: DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY
ON
K6A 1K7

Ship To: DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY
ON
K6A 1K7

Cust Phone #		Warehouse		F.O.B.		Taken By	
		OTTAWA		DESTINATION		Sylvie 613-723-8	
Cust #	Customer P/O #	Required	Orig Order	Slsm	Ship Via	Terms	
05168	18215	10/25/12	1246676.00	PL	DICOM	NET 30	
=====							
Ln#	Bin #	Order UM	Ship	B/O Product	Description		
=====							
1		4 EA	0	4 DB1X1	110-0375-201 3/8	2FL CARB EM	
2 *		2 EA	0	2 SO1X1	136-758 5/16" RAD	CRNER ROUND CUTTEI	
3	CB1115	10 EA	10 ✓	PTD-0571330 0571330	A012 #12 JOBBER	DRILL TIN (
4		50 C	0	50 SP1X100	HX-111 3/8-16X5/8	SKT HD C/S	
5 *		1 EA	0	1 SO1X1	122-105 1/2" 45DEG	DOVETAIL CUTTER	
6	CAB810	515 EA	515 ✓	MMS-D3672-3	.500 X .267 X .031 +/- .002	WASHER, PH	
7	CB1125	10 EA	10 ✓	PTD-0571538 0571538	A012 #30 JOBBER	DRILL TIN (
8	CB1170	10 EA	10 ✓	PTD-0572054 0572054	A012 3/16 JOBBER	DRILL TIN (
9	CB1175	20 EA	20 ✓	PTD-0571125 0571125	A012 1/4 JOBBER	DRILL TIN (
10	020140	300 EA	300 ✓	3M-AB20030360	3" X HN 60G 988R DISC,	ROLOC AB20030	

PLEASE NOTE:

1. NO RETURNS WITHOUT PRIOR AUTHORIZATION
2. ALL SHORTAGE CLAIMS MUST BE WITHIN 10 DAYS
3. BO CODE: BO = QTY NOT SHIPPED IS BACK-ORDERED
CL= QTY NOT SHIPPED WAS CANCELLED
SC= ITEM CONSIDERED COMPLETE - NO B/O CREATED

FILL PACK DATE 10/24/12
Printed on 2012-10-24 at 10:30